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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/737,332	12/15/2003	Rong Jian Yang	USP2342H-JMG	7563
30265	7590 03/27/2006		EXAMINER	
RAYMOND Y. CHAN			KIM, YUNSOO	
108 N. YNEZ AVE., SUITE 128 MONTEREY PARK, CA 91754			ART UNIT	PAPER NUMBER
	, 0 /		1644	
			DATE MAILED: 03/27/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/737,332	YANG ET AL.
Office Action Summary	Examiner	Art Unit
	Yunsoo Kim	1644
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period v  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 29 December 2a) ☐ This action is FINAL.      Since this application is in condition for allower closed in accordance with the practice under Example 2.	action is non-final. nce except for formal matters, pro	
Disposition of Claims		
4) ☐ Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) 6-15 is/are withdrawr  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-5 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/o	n from consideration.	
Application Papers		
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	epted or b) objected to by the Idrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal F 6)  Other:	

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## **DETAILED ACTION**

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1. Applicant's amendment filed 12/29/05 has been entered.

Claim 1 has been amended.

Claims 1-5 are pending.

- 2. It is noted that the Applicant has not updated the US priority in the first line of the specification and update status of all pending applications.
- 3. Applicants' are invited to submit IDS for consideration.
- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-5 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 4,725,428 (of record) in view of U.S. Pat. No. 5,972,312 (of record) and Akita et al. (Journal of Food Science, 1992, 57(3):629-634, of record) for the reasons set forth in the office action mailed 9/20/05.

Applicants' arguments filed 12/29/05 have been fully considered but they are not persuasive.

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Applicants traversed the rejection based on the combination of the reference does not teach the claimed invention (S. mutans types c and d), the intended use of the referenced composition differs from the claimed invention.

The '428 patent is not limited to prevention of colonization, rather it teaches the dental caries preventive composition contains S. mutans antibody (col. 1, lines 5-10, abstract). Furthermore, the '428 patent teaches S. mutans causes dental caries (col. 1, lines 20-36), serotypes c, d, e, f and g may be preferably used (col. 2, lines 45-50). It is prima facie obvious to combine two compositions (serotype c or serotype d) each of which is taught by prior art to be useful for same purpose in order to form third composition (serotypes c and d) that is to be used for very same purpose; idea of combining them flows logically from their having been individually taught in prior art. In re Kerkhoven, 205 USPQ 1069, CCPA 1980. See MPEP 2144.06.

In addition, Applicants argue that the invention of '428 patent is addition of non-ionic surfactant which is not present in the claimed invention. However, the claimed composition is not limited to a composition **consisting** of IgY to S. mutans with an antiseptic, rather a composition comprising of IgY to S. mutans and an antiseptic. Having "comprising" considered open, it allows to include other non-disclosed substances. It is evidenced in the specification of instant application, p. 7, Sample 5, the instant application teaches addition of sorbitol. The use of stabilizer (e.g. humectants, sorbitol, sorbitan, '312 patent, col.4, lines 6-35) in dental product industry is well known.

As discussed in the office action mailed 9/20/05, it is well known in dental product industry to add combination of preservatives or stabilizers as long as the effects of composition are not lessened (col. 4, lines 13-18). Having "antiseptic" being any substance prevents growth of the microorganisms, the addition of sodium benzoate and/or potassium sorbate achieves the intended purpose as well as preservatives or stabilizers.

Furthermore, due to the cost effective mass production of IgY to any antigen as discussed by Akita et al., the combination of teachings has met the claimed composition comprising IgY to S. mutans and an antiseptic.

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Therefore, one of the ordinary skill in the art would have been motivated to combine IgY polyclonal antibodies taught by of Akita et al. in dental caries preventive composition taught by '428 patent to produce more specific antibodies and to reduce cost of production (p. 629, introduction) and combine teachings of the '312 patent to increase stability of the composition and for convenience to use.

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From the teachings of references, it would have been obvious to one of ordinary skill in art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was prima facie obvious to one of the ordinary in the art at the time of invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

- 6. The following new grounds of rejections are necessitated by Applicants' amendments filed on 12/29/05.
- 7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1-5 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a New Matter rejection for the following reasons:

The specification as filed does not provide a written description or set forth the metes and bounds of the phrase "antiseptic composed with". The specification does not provide any direction for the abovementioned phrase as they are currently recited. The instant claims now recite limitations which were not clearly disclosed in the specification as-filed, and now change the scope of the instant disclosure as-filed. Such limitations recited in the present claims, which did not appear in the specification, as filed, introduce new concepts and violate the description requirement of the first paragraph of 35 U.S.C. 112.

Applicant is required to cancel the new matter in the response to this Office Action.

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9. No claims are allowable.

10. Any inquiry concerning this communication or earlier communications from the examiner should

be directed to Yunsoo Kim whose telephone number is 571-272-3176. The examiner can normally be

reached on Monday thru Friday 8:30 - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina

Chan can be reached on 571-272-0841. The fax phone number for the organization where this application

or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained

from either Private PAIR or Public PAIR. Status information for unpublished applications is available

through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Yunsoo Kim

Patent Examiner

Technology Center 1600

March 9, 2006

Patrick J. Nolan, Ph.D.

**Primary Examiner** 

Technology Center 1600